DOCUMENT RESUME

ED 181 295 CE 023 863

AUTHOR Bernstein, Paul
TITLE Career Education and the Quality of Working Life. Monographs on Career Education.
INSTITUTION Rochester Inst. of Tech., N.Y.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
PUB DATE 79
NOTE 36p.; Not available in paper copy due to small, light print
AVAILABLE FROM Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 (Stock No. 017-080-02039-4)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Adult Development; *Career Development; *Career Education; *Careers; Education Work Relationship; Employer Employee Relationship; *Employment; Job Enrichment; Job Satisfaction; Life Style; Personal Values; *Quality of Life; Work Attitudes; Work Environment; Work Life Expectancy

ABSTRACT

A career continuum has evolved with career education being the preparatory phase in the schools and the quality of working life or career development in the profit and nonprofit sectors representing the participatory aspect. Historically, career education has emphasized preparatory processes providing learners with attitudes, knowledge, and skills needed in a fluid world of work. The concept of quality of working life addresses the qualitative relationship between worker and workplace. Its advocates see as fundamental (1) reasonable compensation, (2) job security, (3) a safe and healthful work environment, (4) recognition for achievement, (5) due process in work-related problems, (6) participation in decision making, (7) responsibility for and autonomy over work, (8) flexible time arrangement, and (9) emphasis on education, training, and career development. Welding career education and the quality of working life into a career continuum enables learners and workers to make work a meaningful part of their lives. Work, work values, and career occupy important positions in any concept of a career continuum. A new set of work values increasingly requires challenging, satisfying work available upon completion of career education. Career, a lifelong endeavor, suggests adult growth, development, and socialization. Increasing understanding, communication, and cooperation between career education and quality of life proponents must occur to make the career continuum concept operational. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED181295

MONOGRAPHS ON CAREER EDUCATION

CAREER EDUCATION AND THE QUALITY OF WORKING LIFE

by

Paul Bernstein
Dean of Graduate Studies
Rochester Institute
of Technology

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Patricia Harris, *Secretary*
Mary F. Berry, *Assistant Secretary for Education*

Office of Education
William L. Smith, *Commissioner*

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

CE 023 863

DISCRIMINATION PROHIBITED.—No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance, or be so treated on the basis of sex under most education programs or activities receiving Federal assistance.

Introduction

During the last decade considerable study and experimentation has taken place in both career education and the quality of working life. Both movements have attracted staunch defenders and vigorous critics, but have only occasionally been considered in relation to one another.[1] Career education theorists have long urged the need for a positive relationship between school and workplace. They believed that a functional connection between education and work would provide the rationale for learners to acquire the knowledge, skills, and attitudes to make their occupational life satisfying and meaningful.[2] And they have, with increased frequency, alluded to a changing world of employment in which good work has become a fundamental part of a fulfilled life.

This developing theme in career education had a counterpart in the increased emphasis on the quality of work life in American business and industry. Within the last decade such corporations as General Motors, Proctor and Gamble, General Foods, AT&T, IBM, and Cummins Engine have pioneered experiments to enrich work in a variety of blue and white collar settings. These efforts were emulated in many other places of work and reflected a recognition of the significant changes that have occurred in American work values.

The connections between the emerging career education and quality of work life movements can best be seen through an analysis of work, changing work values, and the lifelong nature of career. It is through these elements that a career continuum can be conceptualized, and significant efforts made to link career development efforts in the schools and a qualitative approach to work in the business and industrial sectors. It is a theme whose variations depict work as purposeful activity in the context of the many human and occupational stages that, in totality, comprise career.

The decade of the Sixties provided the time frame during which attitudes toward work, work values, and career gradually underwent considerable change. Work in life rather than work as life emerged as the touchstone of both career education and quality of work life efforts. Work values shifted perceptibly from an earlier belief that centered on the male worker as a "good provider," on self-dependence through paid work, on the view that hard work was the way to overcome all obstacles to success, and that doing a job well would yield a sense of self-esteem.[3] The cultural revolution of this pivotal decade also "legitimized" the trend toward meaningful work. It did not diminish the desire for the preferred professional and technical jobs nor lessen the demand for status and income that accompanied such work.[4]

By the Seventies, however, a new attitude toward work had emerged. It embraced the need for self-actualization, a lesser concern with economic deprivation, and a belief that workers were "entitled" to participate in decisionmaking. Cost effectiveness and efficiency came under increasing scrutiny, but there seemed to be no objection to hard work so long as it was fulfilling.[5] Work still remained an essential element of existence, but there was a growing emphasis "on the total life experience" which depended on "good family relationships, meaningful friendships, and opportunities to pursue personal interests or to engage in leisure activities."[6]

Career also took on a meaning of unusual importance in the world of work. Career educators in the schools and career development personnel in business and industry moved beyond emphasis on the next job. Their focus and that of an aspiring generation of younger workers was on school and workplace as a unified resource to meet the human and occupational needs of a lifetime. Indeed, all of the participants now locked in on the prospective progression of steps yet to be taken between the poles of career awareness in youth and the conclusion of career in later life.

This broader level of expectation is what Kenneth Hoyt referred to as the "quality-of-work in life." He saw an enlarged aim for career education through the emphasis on "purposefulness and meaningfulness" in education, work, and life in general. And he viewed career education as the appropriate vehicle to provide the largest level of informed choice in a world that exhibited a fluidity of work values[7] and a demand for job satisfaction[8] in the context of career.

It is with this thought in mind that we move to analyze the emergence and continuing role of career education and its function as part of the career continuum. To this will be added a discussion of the qualitative emphases of working life from the Norwegian experiments of Einar Thorsrud to the innovative efforts at General Motors. Only then can we again assess the connections between two of the more significant human, educational, and work-oriented movements of the last two decades.

Career Education in a Changing Context of Work

During the last five centuries the outlines of the modern world began to emerge. The static feudal world yielded to the new middle classes who substituted a free-wheeling market economy for the restrictive covenants of guild and nobility. Modern science, both pure and applied, added to the flux. "New" continents were discovered and swifter routes to others were negotiated. National States emerged in Europe to be followed by a fledgling republic on the western shores of the North Atlantic. But work and life did not change substantially until the advent of the Industrial Revolution. It was from this time, and more particularly in the nineteenth century, that scientific and industrial progress thoroughly loosened the "traditional bonds" of society.[9] There was a loss of sureness in social relationships based on daily life, folkways, religion, and mores. The old social order founded on a sense of community and one's place in that community was weakened, and in its stead emerged the new *Gesellschaft* world: man was now a free agent, an independent person. He could choose not only his place of residence, but his occupation. No longer did man see the old *Gemeinschaft* society as viable: in that world, work and nonwork activities were not drawn as separate realities, and children saw occupational models in parent, relative or friend.

By the latter part of the nineteenth century that comfortable setting based on community, family, and common understandings had lost its sway over western man. The new industrial civilization made mobility a requirement and factory work a seemingly more attractive alternative to the rural and agricultural options. Contracts, conventions, and legislation under State auspices replaced the old "common spirit."[10] The new urban-industrial society required workers to divide their lives between work and family, to develop new technical skills, and to adapt to the Tayloristic discipline of repetitious and fractionated work on the assembly line. The changed world of work substituted a new man-machine relationship for the integrated life of craftsmen and farmers. It led to the growth of urban communities that often became collections of strangers. Still, each person was free to choose occupation and place of abode, and if that new freedom did not include the warmth and social support of the long-lost *Gemeinschaft* world, it did provide for individual elbow-room.

The demands of the new factory-oriented world soon found a response in legislation. Beginning with the First Morrill Act of 1862, the Federal Government began its involvement in support of an improved tie between education and work. But this early initiative in agriculture

and the mechanical arts required augmentation because of the massive industrialization of the United States that soon followed. The new manpower need brought forward the Smith-Hughes Act of 1917,[11] which embodied John Dewey's view that education be related to the practical needs of modern society, that it include job skill acquisition as a direct preparation for work.[12] The categorical funding that characterized Smith-Hughes established vocational education as an option to meet the short-term needs of the labor market. But in doing so, it set vocational education apart from education in general. A value gulf was established that persisted over the ensuing six decades. In the main, vocational education became the opportunity of last resort for those who were not college bound, and little attention was paid to the career development needs of those in the general curriculum.

Vocational education was thus seen as an avenue to directly meet the needs of the country,[13] to provide the job skills needed for entry into the burgeoning economy of the nation. It came to be viewed as courses or programs of less than baccalaureate level to prepare learners with specific entry level skills. Only with the passage of the Vocational Education Act of 1963 were the goals of vocational education sufficiently broadened to include the long-term needs of learners. There was a perceptible shift in legislative emphasis toward "the development of human potential and the employment needs of people, regardless of short-term labor market needs."[14] A still greater tilt in the direction of long-range career development came with the passage of the 1968 amendments to the Vocational Education Act of 1963. While "they did not accomplish the crucial task of merging the academic and vocational in education and of generalizing career awareness into the total educational scheme," the U.S. office of Education did fund a series of exemplary projects (under Part D)[15] that included many career education concepts. They did bring forward ideas that went far beyond "match(ing) student and employer" needs, and included an early analysis of career development by educators such as Bottoms and Matheny. These men asserted that American education had to assume a broader set of responsibilities if the linkage between school and work was to be of long-term significance to the individual. It now had to include, from the elementary school onward, emphasis on self-awareness, attitudinal development, and decisionmaking. Career exploration was no longer to be seen as a "mining" operation to ready a given talent for a particular manpower requirement, but more as a "farming" situation in which all persons were provided with opportunities to grow and develop. And career development was to be organized sequentially from the early grades through high school so that it became a continuing process over the formative years of a person's human growth and development.[16]

Thus, under the auspices of legislation for vocational education did early work on the conceptual base of career education receive an

important impetus. It is more than likely that these efforts to produce exemplary programs and projects under the 1968 amendments helped to insure the positive reception accorded Marland's Houston address of January 1971.

As career education came into broad public focus Marland broached the idea to replace vocational education with career education.[17] Through this as yet undefined concept, he hoped to "elevate occupational development to a par with academic development." Marland sought a way—an idea—by which the regrettable distinctions between students in vocational curriculums and those in college preparatory areas could be subsumed under a positive concept. He hoped to also embrace the large number of students in general curriculums who avoided the snobbish digs reserved for those in vocational education, but whose work lacked the prestige of those going to postsecondary institutions. In short, he offered a new academic proposal "to augment the limited scope and purpose of vocational education." [18]

This new career education vehicle would not be limited to students fourteen years of age or older,[19] but would comprise all learners on a lifetime basis. Career education, unlike vocational education, would include paid and unpaid work[20] and emphasize the "cognitive and affective skills and concepts" not generally found in vocational curriculums.[21] It would help learners find in their education the preparatory processes needed to make work a meaningful part of life, but would differ with vocational education's emphasis on the specific skills required for entry-level positions. These preparatory processes inherent in career education would provide learners with the attitudes, knowledge, and skills needed in a fluid world of work, a world in which specific academic or vocational strengths could quickly become redundant. And while career education proponents did not suggest it as the cure for unemployment or underemployment, it was a way that might enable students to cope with the constancy of change. Hoyt suggested certain skills and attitudes that might address this situation:

1. Basic academic skills.
2. Skills in decisionmaking, job-searching, job-getting, and job-holding.
3. Good work habits.
4. A personal set of work values.
5. Skills in the positive use of leisure time.
6. Skills in dealing with sexual or racial stereotyping in employment.[22]

Thus, career education came to be viewed as a systemic instructional effort in which all educators participated through the infusion of its

components into school curriculums.[23] Career education was not an addition to the course structure, nor was it a free-standing curriculum unto itself. It was not the preserve of a few educators, but rather an opportunity for all who taught.

Career education placed great emphasis on those transferable skills that enabled learners of all ages to become more occupationally nimble: computational and communication skills, analytical reasoning, and skills in information-processing. Collectively, these formed a partial answer to the externally imposed problems of unemployment and underemployment, and the internally felt stresses that resulted from employment that did not meet rising expectations of workers.

Career education was also designed to help individuals develop work values that became an integral part of their belief structure. This reflected the assumption that school and community groups could help learners use the education-work continuum to achieve this objective. But it also suggested that the classical conception of work—that associated with the Protestant work ethic—was no longer accepted as a societal norm.[24] Work for its own sake, the need to do one's best at all times, and pride in service or product gave way to such new values as self-fulfillment, autonomy, and participation in decisionmaking.[25] Work now shared its old position of primacy with the competing pulls of family, friends, individual interests, and leisure.[26]

In this sense, career education had to be seen in its continuing context, in its potential utility over a lifetime. It was "an integrated and cumulative series of experiences" designed to help learners make "relevant decisions" about their lives and develop the skills required to participate effectively in the variety of life roles that collectively defined a career. Career education was designed to enable individuals at different life stages to fulfill their occupational, familial, and community roles,[27] and viewed career not as a series of fragmented jobs one sees "in retrospect," but as a meaningful totality to be designed "in prospect."[28] "Career is the totality of work one does in his or her lifetime."[29] It conveyed a sense of time and identity[30] and "the personal value system of the worker"[31] in his occupational and nonoccupational roles. It did not necessarily suggest an onward and upward ascent in the "progressive pursuit of one occupation,"[32] and may be more fully sensed in this characterization by Everett Hughes:

> Career, in the most generic sense, refers to the fate of a man running his life-cycle in a particular society at a particular time. . . . The career includes not only the processes and sequences of learning the techniques of the occupation but also the progressive perception of the whole system and of possible places in it, and the accompanying changes in conceptions of work and of one's self in relation to it.[33]

Perhaps the concept of career within career education has been best

summarized as follows by Gene Bottoms: "A career is what you live to do, not what you do to live." [34]

The concept of career development also requires some further analysis in relation to career education as a whole. In this context it should be seen as the individualization of the concept of career education. As such, it is a "developmental process" over a lifetime that enables learners to engage in a career involving working and nonworking elements as part of a "total lifestyle." It could be observed as that aspect of career education engaged in the implementation of the concept, and comprised such developmental stages as "career awareness, exploration, decision-making, planning and preparation, establishment, maintenance, and decline." [35]

But career development took on a somewhat different connotation in the business and industrial community. While here it was sometimes called human resource development or organizational development, the concept was depicted as the individual's progression on a career path or within an occupation.[36] Ideally, career development was a coordinated attempt to match the requirements of the enterprise and the aspirations of the individual. And while this was not always feasible, the private sector increasingly accepted the need to address the personal hopes of its workers. It did not wish to accumulate a workforce of unmotivated workers and managers, and recognized, in a growing number of situations, that work as the old center of life was superseded by a balanced and long-term view of existence as self-development, family obligation, and career development.[37] Career fulfillment through carefully crafted quality of work life programs gradually received greater acceptance as a better way of reaching personal and corporate goals in the private sector.

But could educators better help to prepare individuals for all of this? Was it feasible to assist others in the acquisition of skills, knowledge, and attitudes required to make work a meaningful and productive part of life? [38] Clearly, it was necessary to try. But career educators had to avoid the useless exercise of picturing all work as uplifting when an increasing segment of the younger population found it less than satisfying.[39] To do this would invalidate the concept of career education.[40]

There is little question that a growing number of entrants to the labor force will increasingly seek nonalienating work that offers them a measure of "autonomy, responsibility, and social connection." To be expected is a greater demand for self-development as part of an actualized life. Work that appears to inhibit the growth of "personal potential" [41] will be shunned or accepted with the most negative reservations.

Both career educators and quality of worklife advocates, acting as a group, clearly need to consider an approach to the problems of work, work values, and career as a collectivity. One important reason is that a different and more individualized view of the meaning of work is taking

shape. It is many leagues from the Protestant work ethic's demand for hard work, frugality, and self-denial.[42] Yet it cannot be said that there is disillusionment with work itself, but more with the institutions of work that yield less than the implicit promises of school and society.[43] Career educators and quality of worklife advocates bear a special responsibility, since they have claimed their approaches were appropriate ways to deal with the new, more individualized work values of a modern labor force. They should now also consider a career continuum that is focused on learners and workers. And within this continuum they should include a broad vision of work in career, work in a lifelong setting, and work that recognizes the changing needs and aspirations of the individual in the context of his or her human growth and development from childhood to retirement. It is the attention to career that can draw together the special possibilities of career education and quality of working life. For this to occur, career must be seen in prospect as a progression of occupational activities that are dependent on the accumulated education, experience, and self-understanding of each person. Career is the occupational linkage that gives life more meaning than a succession of employments. It is developmental and cumulative and can join the education and work of the past with the possibilities of the future. Career can provide identity and a sense of self-esteem, and should be an instrument to complement the aspirations of the individual and the needs of an organization. But all of these possibilities clearly require a cooperative and integrated approach to work and work values by career educators and quality of worklife proponents.

The suggested career continuum is a viable possibility that will now be explored through an analysis of the quality of working life which, in turn, will be considered in relation to career education in a concluding chapter on "Connections."

The Quality of Working Life

Suggested connections between career education and the quality of working life inevitably lead us to an analysis of the latter movement. Sometimes spoken of as the humanization of work,[44] the quality of working life is a new perspective on work by researchers, managers and workers themselves. It is an attitude of mind, a situational feature in some workplaces, and an aspect of the societal demand for an enhanced quality of life.

But to speak of the quality of working life is to depict the qualitative relationship between worker and workplace. It is to add the human dimension to the economic and technical considerations which have comprised the central focus of the working world. And it is to see the environment of work in the light of rising levels of aspiration and increased educational capacity.

The quality of working life is a challenge for organizations who wish to help workers deal with not only the material requirements of life, but those nonmaterial considerations that distinguish meaningful from alienated work. It may also prove to be an element in the search for improved productivity, but the results on this score are not conclusive.

For both Europe and North America we have made great progress in addressing the need for reasonable income, leisure, and a base of social benefits that enable workers to ride out recessionary storms. But we are now engaged in a debate with ourselves about the nature of work in our lives. Do we wish four and a half decades of working existence to be time served in employment? Or are we seeking a measure of meaning in work that could make satisfying employment "the fourth great social aim of our century"?[45]

Whatever the precise individual answers to these questions may be, the shift from an industrial to a post-industrial age has brought in its wake a sharp change in work values. The quest for some control over the working environment and a desire to maximize personal potential has become characteristic of the "new" workers. In addition, there has been an increased demand for a better "fit" between human needs and technology.[46] It is encouraging that some positive responses have already been made to these concerns through work in ergonomics[47] and job redesign.

But the greatest problem may be the need to create a growing number of preferred managerial and professional positions. At this point it is not at all clear how the quantity of challenging and creative jobs can be developed to meet the qualitative demands of new entrants into the labor force particularly college graduates. In fact, a surplus of between 1.6 and 8 million college graduates is forecast for the United States between now and 1985,[48] while estimates vary widely among such analysts as Hecker, Lecht, Froomkin, Stern and Best, we clearly have a quantitative problem within a qualitative concern.[49]

This aspect of the desire for a quality of working life is not limited to baccalaureate degree holders. One only has to note that the educational attainment of the entire labor force has also shown a dramatic increase in the last twenty-five years. It has risen from 10.9 years of school in 1952 to 12.6 years in 1976.[50] For blue collar workers alone, the median educational attainment also grew substantially: from 9.2 years of education in 1952 to 12.0 in 1972.[51] If the belief of many researchers that education tends to raise the level of aspiration and expectation from work is true,[52] then we may have a fresh insight into the industrial disturbances at Lordstown, Ohio in 1972 where the average number of years of schooling was 13.2 (1975).[53]

It is likely that the next ten years will see the emergence of a new generation of better educated union leaders who will perceive quality of working life issues to be of paramount importance.[54] Better educated

workers and union leaders, changed work values, and a lesser concern with economic insecurity [55] all suggest that both white and blue collar employees may soon be pursuing similar work objectives. The relative decline of blue collar employment as a proportion of the total labor force strengthens this possibility.

All of this leads us to an examination of the context that circumscribes the quality of working life. It includes:

1. The characteristics workers bring to the job: values, personality, motivations, expectations, abilities, experience, plus family and cultural influences.
2. The nature and function of the organization [56] including what might be called the organizational climate.
3. The relationship between worker and organization: this includes the work done by individuals, interactive processes among individuals or groups, and beliefs or values that condition the culture of the workplace.

In essence, the enterprise is a sociotechnical system that produces goods and services for its consuming public and the economic, social, and psychological necessities of life for its employees. It exists in relation to external or environmental forces, and as such, can be considered a subset of a larger system. Viewed in this manner, the organization is the recipient of Federal, State, and local regulations and law. It is also the beneficiary of union activity, consumer concerns, and international political tides, and does not escape the impact of "pervasive social forces" such as rising educational levels and resulting expectations, decreased willingness to accept authority, increased wealth and job security, and a shift in work values in the direction of self-actualization.[57] One might also add the increased suspicion of large organizations, a bracket that has also come to include unions [58] and government.

The elements of a quality working life also must be considered in the light of several other fundamental transformations in our society. Among the more important of these are:

1. The desire for equality: in the world of work this can be seen in the demand for equal treatment by women and minorities.
2. The desire for additional knowledge: more workers and employers realize the need for further education or training to avoid obsolescence and cope with the requirements of a "knowledge revolution." In 1975 alone, American industry spent about $10 billion for training programs.[59]
3. The change in societal values, including work values.[60]
4. The demand for flexible time arrangements at work.[61]
5. The impact of technology: its effect on the organization can be

considerable, particularly on the shop-floor of certain production settings.[62]

6. The huge influx of women into the workforce.[63]
7. The demographic impact of the baby-boom of 1946–1961 on the labor supply.
8. The broad societal impact of continuing high rates of inflation.
9. The trend toward early retirement.[64]
10. The continuing shift from self-employment to work for wages or salaries. In 1950, 80 percent of all employed persons worked for a wage or a salary; by 1970, this number reached 90 percent.[65]

These larger considerations enable us to see the quality of working life in broader focus. Its possible applications are often selective rather than global, and specific settings often suggest differential applications.[66] In some workplaces only modest changes will be feasible. Managerial fears that their authority will be diminished or their priorities redirected will block some experiments. Some executives will resist workplace reform out of concern for future promotion in organizations that are not fully committed to such changes. In addition, some enterprises will be unwilling to try new approaches because many of their workers are satisfied with their traditional jobs in the office or in assembly line, batch, or continuous process work. Technological or production constraints, a sense of inequity in parts of the firm not included in experimentation, union contract provisions, or a poor economic climate may also relegate quality of worklife planning to the future in some situations.[67] But enough successes have occurred at Dana Corporation, Harman Industries; General Motors, Eaton, Proctor and Gamble, IBM[68] and elsewhere to suggest that the redesign of work is desirable and feasible for many workers who increasingly expect the relationship of education and work to "tally with the realities of labour demand."[69]

What, then, are the fundamental features of quality of worklife programs? Perhaps it would be best to analyze those elements that most advocates would accept:

1. Reasonable compensation and fringe benefits.
2. Job security.
3. A safe and healthful work environment.
4. Recognition for achievement through promotion, pay, or other meaningful rewards.
5. Due process in the settlement of grievances, separations, or other work-related problems.
6. Participation in decisionmaking.

7. A reasonable degree of responsibility for and autonomy over the immediate work process.[70] Looked at in conjunction with the concept of participation in decisionmaking, this involves planning, doing, and evaluating the tasks to be done. It implies the use of such nonbureaucratic work structures as semi-autonomous work groups and matrix organizations, and often involves job redesign. The essential element of individual control and responsibility can be seen in the various experiments of Einar Thorsrud's Norwegian Industrial Democracy Project at such plants as Hunsfos, Nobø, and Norsk Hydro.[71] They have also been replicated at Volvo's Kalmar plant where the focus has been placed on small workgroups of about 20 persons who could regulate the work pace, rotate jobs, have more social contact, and be responsible for the total work process rather than a fragmented portion that might not enable the worker to identify with an end product.[72] In the United States, General Motors has placed increased emphasis on worker responsibility and decisionmaking,[73] in such assembly plants as Doraville and Lakewood, Georgia,[74] Tarrytown, New York,[75] and other branches in various parts of the country. Similar situations are also operative at the Dana Corporation in Edgerton, Wisconsin, the Harman Industries plant in Bolivar, Tennessee,[76] and in such other organizations as H. J. Heinz, TRW, Mead Corporation, Rockwell Manufacturing, PPG Industries, and Sherwin-Williams.[77]

8. Flexible time arrangements: beyond these seven elements, work reform advocates tend to diversify their emphasis. Quite a large number, however, stress the importance of flexible work patterns as an essential facet of a quality working life. These permit educational opportunity that is of benefit to both the organization and the individual and allow for greater attention to family responsibilities in multi-worker families. Since wives were working in 49 percent of all American families in 1976, flexible work scheduling could indeed facilitate intra-familial planning to deal with such considerations as child care.[78] The need for some attention to this matter can be underscored by the fact that in 1977 some 20 percent of employed adult women chose part-time jobs by choice. The average part-timer was married, had school-age children, and worked almost 20 hours per week.[79]

   Swart analyzes the temporal aspect of a qualitative approach to work by a thorough analysis of its various possibilities. In addition to the part-time option, he notes the use of the task system (work day ends when job is completed), job sharing, the compressed work week (4–4½ days that embrace 40 total hours), staggered hours, flexitime, and flexitour.[80] While flexible time arrangements obviously have their advantages, researchers have found

some substantial problems in the shift option that occurs during evening hours. Higher rates of illness, sleeping problems, tiredness, and broken eating patterns have been coupled with the disruption of social and family life. These suggest potentially serious employee and organizational problems.[81] Thus, the qualitative aspects of night or shift work may not be positive if an enterprise must work two or three shifts for long periods to meet market demand for goods or services.

Because of these considerations, a significant number of work reform proponents continue to press for greater attention to time as a function of a quality of work in life. They suggest attention not only to flexible hourly or weekly arrangements, but also to work breaks, alternation of shifts, and excessive overtime.[82] Behind it all is a balanced approach to the temporal arrangements of work, family, and leisure. Work may still lay claim to an important position in the hierarchy of life values, but it can no longer crowd out the competing elements that draw on the limited packet of time that is available.[83]

9. Emphasis on education, training, and career development: education and training on the job or in off-site schools is basic to personal growth. It can also provide substantial benefits to the firm. In this sense, education through the organization carries with it considerable opportunities for career development and occupational mobility. It is lifelong and based on the concept of alternating stages for work and education. While some businesses such as American Telephone and Telegraph spend $700 million in a given year on employee education,[84] only a small percentage of workers, especially blue collar, avail themselves of the numerous opportunities offered by private sector employers.[85] This strongly suggests a role for career educators in the schools and career development specialists in business, industry, and the nonprofit sector.[86]

Both should stress, even more emphatically than they already have, that personal and professional growth is dependent on the ability to cope with the occupational, technological, and socioeconomic changes of society. And both should, as part of career continuum, work in tandem to help learners and workers see the necessity for education, training, and self-understanding as a *sine qua non* for meaningful work within the lifetime parameters of career. More will be said on this later as we explore the connections between career education and the quality of working life.

10. Use of nonbureaucratic forms of work organization: this qualitative need was alluded to earlier in connection with the need for greater worker responsibility through semi-autonomous work

groups and matrix structures. Because many organizations have become large, bureaucracies have developed on a chain of command or hierarchical basis. Rationality and impersonality have become their hallmarks as they have sought obedience to policy, regulation, or law. Bureaucratic structures also have personified the demand for uniformity and predictability, but their size left individuals unable to comprehend the system of which they were nominally a part. Depersonalization and standardization of response became their *modus operandi*.

Bureaucratic work design also caused other subtle but serious problems. Faced with a less than positive work environment due to bureaucratic controls, employees could predictably react by challenging the "basic value premises" of the organization as well as the "legitimacy of [the] leadership." Alienation from the work itself as well as decreased innovation and performance were likely outcomes when bureaucratic rationality stifled individual initiative and self-esteem.[87] In addition, relationships with co-workers and supervisors were affected adversely, while the attainment of personal and professional goals frequently were placed in an occupational limbo.[88] The resulting lack of commitment often led to a dependent work force whose overspecialization[89] and hierarchical separations became the white collar counterpart of fragmented, monotonous, and meaningless labor.

All of this does not suggest that the problems of work in a bureaucracy have just descended on us. Examples could be found in the officialdom of ancient Egypt, Sumeria, and Rome. In more recent times the advocates of systematic[90] and scientific management have added their weight to the cause. Government regulations and law, ostensibly for the popular benefit, have also spawned depersonalized and remotely-controlled work systems that have sapped the innovative pulses of the worker and frustrated the needs of the citizenry.[91] Clearly, there is need for a qualitative approach to work organization that meets the needs of large enterprises and the people who must work in their precincts.

11. Social aspects of life at work: a considerable literature on this subject has emerged since the completion of the Hawthorne experiments in the early Thirties by Elton Mayo and his colleagues. These studies showed the importance of social relations on employee attitudes, interpersonal relations, and communications. They also demonstrated the power of group norms and values, the role of supervision, and the value of worker participation. Most important of all, the new human relations movement that followed modified Taylor's vision of the worker as economic man. Social motivations could now be appended to monetary

aspirations, and managers could practice good human relations for their own sake. Although no causal relationship was shown between a positive social atmosphere at work and the motivation to produce, quality of work life proponents have placed considerable stress on social relations between workers and managers and among workers themselves. Some have also noted the importance of "social integration" into the working environment through the absence of prejudice, status symbols, tall hierarchies, and other forms of stratification. Walton also noted the value of "supportive" groups to provide emotional buoyancy, and suggested the critical importance of community, trust, and "openness."[92]

Mayo may have best summed up this social aspect of life at work when he stated:

> Man's desire to be continuously associated in work with his fellows is a strong, if not the strongest human characteristic. Any disregard of it by management or any ill-advised attempt to defeat this human impulse leads instantly to some form of defeat for management itself.[93]

12. Open communication plus adequate and timely "feedback" to employees: a key element of this aspect of a quality working life was a managerial style that lent itself to a free mode of informational exchange. Open communication was particularly valuable in settings that used teams or other decentralized organizational structures. In this sense, it was not simply handing out orders to the hired help, but a free flow of data that recognized the worth of the worker. Open communication could also be described in terms of a nondefensive managerial approach that facilitated both organizational goals and learning through work. It facilitated the growth, empowerment, and satisfaction of the individual, and tended to diminish the usual quota of rumors and organizational paranoia. Most importantly, it helped avert an erosion of trust, the *sine qua non* of a qualitative working situation.[94]
13. Recognition of the demands of work, family, community and leisure: Walton and Freedman probably laid the greatest stress on the competing pulls felt by the modern worker. Younger entrants into the labor force were unwilling to be defined "*solely*" in terms of their roles as workers, and protected their commitment to family, friends, and leisure. Unless work provided self-fulfillment, a congenial social atmosphere, and a sense of identity and self-esteem, they were more than willing to withdraw their allegiance to a given job.[95] Yankelovich referred to these workers as the "new breed," a group that surfaced in the late Sixties and early Seventies and included the young, the better educated, and

the more affluent. He suggested that for this growing contingent work without meaning might turn employment into a symbolic attachment to the workplace. Demands for pay and fringe benefits could escalate, while commitment to work itself diminished.[96] If Yankelovich is correct, we may have had success in making the American worker a successful consumer, but a degree of failure in helping him become an efficient producer.

14. Redesign of work: the qualitative aspects of work restructuring have been noted earlier in several of the preceding sections. This unit has been used to draw together the various strands.

    A wide variety of empirical studies on work simplification in both Britain and the United States between 1924 and 1973 have been cited by Warr and Wall[97] to show the negative effects on job satisfaction and mental health. Work that had little variety, autonomy, identity with a whole task, or "feedback" tended to be viewed more negatively.[98] Fragmented and highly specialized work may have had its economic successes in the past, but the wider horizons of new labor force entrants indicated potential problems for the modern adherents of Taylorism.

    The redesign of work, on the other hand, has been utilized as an antidote to some of the less desirable features of scientific management. It can be said to have occurred whenever a substantial change was made in a task or an interrelated system of jobs. While the change might be either individual or systemic, it involved such strategies as job enlargement or rotation, group approaches, or the use of sociotechnical systems to improve motivation, productivity, and satisfaction. Work design was meant to increase the qualitative job experience of the employee and the general effectiveness of the organization. It was an approach to work that enhanced the possibilities for personal growth, fulfillment, security, and satisfaction.[99]

But other changes were often necessary to encourage the acceptance of different work systems. New pay structures plus careful attention to performance appraisal and career review might be needed to place work changes in a context of opportunity. In addition, a somewhat different managerial role and flexible working hours could add positive features to plans for the redesign of work.[100]

Work restructuring could also prove to be a more direct approach to behavioral change on the job.[101] In place of subtle attempts at prior attitudinal change it offered the possibility of using work itself to achieve different occupational behavior.

Work redesign is a means to achieve other important ends. Its chief hope lies in the recognition that management has made changes whose primary thrust is the improvement of life at work. What can follow is greater commitment as the salient feature of a motivated work force.

The quality of working life is based on a mutuality of trust by workers and management. The lengthy process required to restructure work, adopt a sociotechnical system, or seek greater organizational effectiveness—all aspects of a quality of working life according to Mills [102]—require patience and time. The trust may develop with the "doing."

An example of this evolutionary process was the transition from a bitter adversarial relationship to a cooperative working environment at the GM auto assembly plant in Tarrytown, New York. Workers and managers found better ways to work and plan together despite disagreements that have occurred from time to time. It was the fund of goodwill gradually accumulated since 1972 that offered the hope members of UAW Local 664 could one day recommend employment at GM to their children. Several workers at Tarrytown suggested the old managerial view that "I am the boss and you are the horse" has undergone considerable transformation. Negotiation by trading off grievances has generally been supplanted by an adult relationship of respect.

Perhaps the Tarrytown effort and the hopes of all qualitative work experiments can be summed up by James Rae's view of the worker: "Treat people as human beings and all other things will fall in place." [103]

Connections

The fundamental connections between career education and the quality of working life can best be seen through the prism of work: career education was the preparatory phase, while the quality of working life comprised the participatory aspect. Taken together, both embrace a career continuum in life that includes career education in schools and career development in the profit and nonprofit sectors.

But the implicit concern is that advocates of both approaches to work have not seen their efforts in relation to one another. A few exceptions such as Hoyt, Super, and Marland make the point. Yet both movements are conceptually connected through the medium of satisfying and meaningful work. They are vital to the understanding of newer work values and different ways to comprehend the role of career. And both are integral to the comprehension and utilization of recurrent education as a force for continued growth and self-development in work and life.

Most important of all is the need to weld career education and the quality of working life into a career continuum that enables learners and workers to make work a meaningful part of their lives. It is based on the premise that learners are workers and workers are learners.

Inescapably, we are compelled to look more closely at work if this linkage is to convey the intended conceptualization. Work is the common element, and therefore needs some extended treatment.

Work

A conceptual jointure between career education and the quality of working life is based on the assumption that satisfying work will be available to those who move through the career education part of the career continuum—the preparatory phase. Without such work, the promise of career education is illusory. And with equal force, organizations that cannot provide good work will soon have more and more unmotivated and unproductive employees. Quantitative problems regarding such preferred jobs are likely to remain until the mid-Eighties, but career educators and quality of worklife advocates must together address the preparation for and participation in challenging work.

Jerome Rosow of the Work in America Institute spoke to this point in terms of declining effort and productivity:

> It isn't that people are lazy or less willing to work. They just expect more out of work, apart from money. And if they don't get it, they do what's required, but they don't make that extra effort.[104]

That organizations are seriously addressing the issue of quality in both work and life can be seen in the results of a recent survey by the congressional Joint Economic Committee. The study covered 1,290 businesses of various sizes in ten large cities, and found that quality of life factors were more important in assessing a particular business climate than labor costs and taxes.[105] If one adds to this an estimated 2,000 quality of worklife projects in the private and public sectors, the emphasis on a qualitative tie between career education and the quality of working life takes on an aura of reality not recognized by critics.[106]

Work must also be analyzed from yet another perspective. This aspect has become a running debate between the advocates of the "compensation" and "spillover" approaches to work, a dialogue that is germane to the career continuum concept. Advocates of the "compensation" theory suggest that efforts to redesign or enrich work will founder, that worker autonomy is not a realistic goal. Tasks can be rearranged, but the undesirable work remains. It is better to accept the hierarchical order found in most firms, a task made easier by the conditioning that occurs in the home, school, and military. In lieu of work redesign, give blue collar employees the same off-the-job freedoms white collar professionals have: flexible working hours, access to a phone, and the right to leave the production line for good reasons.[107] Let the pay and fringe benefits be improved so that workers can enjoy their lives beyond the place of work.[108] In short, do not tinker with the problems of the office, field, or factory, but compensate for them by enlarging the material benefits of work. Enable the worker to become a more prodigious consumer, but do not delve into the reasons that might explain why he or she are unmotivated and inefficient producers.

The "spillover" theorists do not accept the inevitability of undesirable work. Instead they argue that job dissatisfaction carries over to other areas of life. An early researcher of the auto industry put it this way:

> Job dissatisfaction is part of this system of interdependent feelings; it is positively linked, though to a moderate degree, with each of the other measures of satisfaction. The relationships are thus consistent with an interpretation that conceives favorable or unfavorable job feelings as carrying over to produce corresponding feelings in other sectors of life.[109]

A more recent survey on happiness by Jonathon Freedman and Philip Shaver based on 100,000 responses to questionnaires in *Psychology Today* and *Good Housekeeping* plus related surveys at the University of Michigan using representative samples of the entire population suggested that "70% of the people who were happy in their jobs were also happy with life generally." Freedman and Shaver also found that while money and security were factors in job satisfaction, once "enough" was available to live reasonably well, it did little to determine overall happiness. "Interest in and the value of the work" on the other hand were noted as important aspects of job satisfaction.[110]

For those who lean to the idea of the career continuum as an approach to satisfying work in life, the "spillover" theory offers more comfort and support. But it must be recognized that workers *bring* more than their bodies to office and factory: they convey attitudes, experiences, values, and cultural influences from the general society into the particular enterprise. Thus, "spillover" may operate in two interdependent directions. If it does, the worker serves as the transmitter on a two-way sociological channel.

Some commentary should also be added as to how the career continuum might be a positive response to the *Gesellschaft* world. How can it be of assistance to societies in which man has broken from the traditional order and become a free agent? How can it help workers who are free of the old role models and able to choose? Freedom, of course, imposes the responsibility to choose, and choice has been made exceedingly difficult by the abundance of possibilities. The *Dictionary of Occupational Titles* alone lists over 20,000 jobs.[111] The multiplicity of choice, technological change, fluctuating work values, and the absence of role models all contribute to the need for some assistance outside the family. Career educators have stepped into the gap in the nation's schools, while career, organization, and human resource development persons have taken on similar roles in industry and government. Their purposes have been similar in those schools and businesses that concentrated their efforts on human development first. Where the emphasis has been placed on job-entry qualifications in the absence of career education skills as the first order of business, career education and organizational development have had lesser chances of success. Concentration on a career continuum

based first on the learner and worker is the surest way to motivate and obtain better productivity. But the order of things becomes crucial. Emphasis on the individual not only must be on the primary and initial thrust of any career continuum, but it must be perceived that way by those who learn through work and work in learning. Kenneth Hoyt summed up the need for more dialogue and cooperation between educators and employers relative to the need for meaningful work:

> In the past, school people have spent a considerable amount of time listening to employers tell them what they would like to see in their employees with respect to work attitudes and job skills. In the future, school people are going to have to spend some time telling employers about the kinds of conditions that must exist in the workplace if work is to be satisfying to every worker.[112]

Recognition of the message in the Hoyt statement can be read in a March 1977 speech by George Morris, Vice President of Industrial Relations at General Motors to the Society of Automotive Engineers:

> When we began applying organizational development principles about seven years ago, our focus was on improving organizational effectiveness. We saw improvement in the work climate as naturally flowing from these efforts. I think now we have reversed these objectives. Our primary objective is improving the quality of work-life. We feel that by concentrating on the quality of worklife, and wisely managing the systems that lead to greater job satisfaction and feelings of self-worth, improvements in the effectiveness of the organization will follow.[113]

If the concept of the career continuum is to have broad acceptance, its relevance to work has to be seen in yet other perspectives. Work must be considered in relation to technology, task, product, and the physical arrangements of the workplace. It exists vis-a-vis supervisors and co-workers, and is not unaffected by pay structures and personnel practices. Work is also tied to the forces that shape the total climate of the organization: its managerial style, general policies, the economic conditions under which it competes, its structure, values, life stage, nature of the work, and general worker characteristics such as age, education, race, and sex. Also to be considered is whether a company is a mature business or an emerging enterprise.[114] Not to be left out are the effects of law and regulation plus the influence of activist groups and academicians on corporate ethics, the use of outside directors, and the social responsibility of organizations.

If this were not enough work must also be understood in relation to pay. As purposeful mental or physical activity that leads to positive outcomes, work may be paid or unpaid. In the unpaid sector, it would include the efforts of students, housewives, and volunteers. Such work has come to be recognized not only as socially important, but as activity that has economic value in itself. Even certain types of leisure might fall under this concept of work, since one person's work is another's play.

Work can also be perceived as a source of identity and dignity. If the career continuum is to have any meaning, these must be implicitly built into work structures, interpersonal relationships, and avenues of recognition. Work must have some relationship to the character of the workers. It must enable them to pursue their tasks with an element of zest and positive feelings. Both they and the enterprise can be the ultimate beneficiaries.[115]

There must also be a fresh look at the relationship of work and time. Since the inauguration of the first large-scale flexitime system in Western Germany some twelve years ago, 6,000 firms have experimented successfully with new worktime arrangements.[116] Quality of worklife proponents have long been aware of the importance of flexible worktime arrangements, but only a few career education advocates have seen this as a key aspect of work in life.[117]

Work can also be perceived through the worker's relationship to people, data, and things. And finally, it cannot be separated from the culture, social forces, and market conditions of which it is an integral part.

Work Values

If the role of work is basic to thinking about a career continuum, then work values occupy a position of equal importance. It is an analysis of these values that may help us to better understand changing attitudes and motivational patterns.

Since the Fifties "traditional social roles" have undergone considerable alteration. The relatively routine and expected responses to life problems that could have been predicted under the old social order yielded to personal coping, a function of the new freedom of choice in lifestyle. An individual quest for identity and place soon supplanted the "integration of experience" that had been provided by home, family, and community. And while it was not an entirely happy experience for younger persons, they exhibited a high degree of self-confidence in a world that had torn itself loose from its ancient social moorings.[118]

The emerging life values of the Sixties caused many new entrants to the labor force to be less motivated to work and produce because of money and promotions alone. These elements did continue to have considerable influence, but the newer and more powerful expectations for personalized work and self-fulfillment were rapidly gaining sway. Unless work provided meaning and recognition, the chances for emotional withdrawal coupled with an ever-increasing demand for pay and fringe benefits as compensation could result. Clearly, the incentives of yesterday no longer served as an adequate response to the motivations of today.[119] Young workers in particular demanded that their needs for

achievement, recognition, and job challenge be met.[120] They wanted congenial associates, preferred to work in smaller groups, and desired more responsibility earlier in their careers. And they tended to make shorter and more "one-sided" commitments: "the employer is more obligated to them than they are to him."[121]

Also of significance was the changing view of work as part of life. Not only were younger workers unwilling to submerge their individuality to the requirements of the job, but they were more inclined toward a "balanced view" of self, family, and career development. They also expected organizations to provide the avenues leading to career fulfillment, and failing this, were more than willing to leave or give less than their best.[122]

Somewhere in all of this lies the core of a new outlook on work based on a very different set of work values. In 1930 Adriano Tilgher saw work as the summation of man's virtues and duties. It was in work that man saw his fulfillment and identity. His "code of ethics," in effect, was subsumed in the restless pursuit to do, transform, and create. And the avowed purpose of all this activity was to bring forth new work and wealth and solve the material problems of a civilization devoted to industrial growth.[123] Freud saw work as important in itself, or as an activity that more closely linked the individual to reality.[124] Today most individuals continue to view work as a key part of their lives. But they look to work itself for satisfactions that include but go beyond money, and they less often see work as the totality of their existence.

The outcomes of career education and a quality of working life can together help to meet the vastly different goals of the modern worker. These objectives emanate from a new set of work values that increasingly requires challenging work—"work that ennobles the product as it ennobles the producer."[125]

Career

How, then, does the concept of career continuum relate to career? If career continuum is defined as the combined efforts of career education in the schools and universities and career development in the workplace, then career itself should be interpreted as that progression of occupational activities whose totality is a key part of life outside family, friends, and community. In a quality of working life context, career is more than a guide to occupational mobility. Rather, it is a perception in prospect of one's occupational possibilities and an understanding of the education, training, and experience needed to fulfill lifetime aspirations.

Career stretches far beyond the job entry emphasis of vocational education, but includes it as an occupational building block. It suggests wider horizons and jobs that help to promote the largest capacities in

each of us. Career is the larger motivating force that gives life more meaning than a succession of jobs. It is developmental and associated with adult socialization as much as with occupation. Career can provide the worker with identity, and link the work and education of the past with the anticipated opportunities of the future. In short, it is a lifelong occupational linkage tied to persons and "personal value systems."[126] Taken together, the internal and external[127] aspects of career can enable individual and organization to join in a common endeavor to give work the meaning and centrality it once enjoyed.

For this to occur, career must be cast in a longitudinal framework that conveys a sense of time, identity, and movement in work. It must also embrace changes in the conception of work and the relevance of those changes to each individual during the four decades of working life.

Career should also be seen in relation to the entire process of human growth and development. Career educators such as Hoyt, Goldhammer, Taylor and others have long viewed career and the career development process needed to implement it as a lifetime endeavor. They have advocated collaboration with industry, labor, and government in furthering this objective, and have urged careful consideration of the work to be done in the stages from career awareness and exploration in youth to career closure in the later years of life. And they have given due recognition to the central role of career in life because of its impact in determining where we live, our social friends, status, and economic position.

But the research in adult development as it relates to career has only recently received a measure of attention from quality of worklife advocates and human resource leaders. Yet much of significance has been learned. During the last two decades Erik Erikson and Bernice Neugarten spoke eloquently of the "role of age and timing," the change in outlook that occurs as one's focus moves from "time since birth" to "time left to live." This gradual shift implied a lessening sense of control over life and work and a greater acceptance of the finite nature of life. There was a diminishing belief in the probability of great achievement and a greater sense of satisfaction with existing reality.

If the time imperative from adolescence to the onset of retirement is examined closely, some important general patterns emerge in relation to work, family, and leisure. Levinson, Sheehy, and Gould described the period from the late teens to the mid-twenties as the shift from adolescence to adulthood. It is often a period that embraced career decision-making, planning, and preparation. Initial ties to work and family that evolved in the mid-twenties are soon superceded by a period in the late twenties and early thirties when early choices of work and lifestyle are often reevaluated. If the thirties then tend to become a time of consolidation, productivity, and emerging self-confidence, the forties suggest the limits of life. There is a realization that only some goals will be

reached, that if one is to make a significant career change the wide turn must soon be made. The so-called "mid-life transition" quickly becomes the occupational fork in the road.

But even this need to change or affirm the past should be understood in relation to the growing importance of friends, relatives, and spouses. It is a trend that is likely to continue into the fifties. The two decades of preretirement life are thus characterized by the growing value attached to social and familial relationships and the greater acceptance of more attainable career goals.[128]

Career, then, is intimately involved with the process of adult development. The initial choice of occupation is more than a matching of work and employee, since it is often perceived as a lifelong commitment. The anxiety and vacillation of the first contact with career is influenced by the desire for elbow-room and fulfillment. It is also tempered by the forces of conformity, but above all by the need—even the pressure—to choose from the hot table of opportunities. There are thus two concomitant pressures on the young worker: the imperative to choose and the desire to have a realm of autonomy on the job. But the tensions of work in life often continue in the thirties and forties. Work that is not satisfying and progress that is turned aside all have to be faced. The many possibilities of youth can easily become psychologically entangled with current work that is no longer meaningful.[129]

And all about there appears to be an occupational universe that beckons with opportunity. But should one make the leap? Can one? In the forties life seems both finite and yet still open. The answers to this dilemma of career in life are individual, but career educators and quality of worklife advocates must become more attuned to the new research in adult development if they are to collectively give meaning to the concept of career continuum.

First Steps

In both implicit and explicit ways it has been suggested that career education and quality of worklife proponents have not worked in close liaison despite their mutual interests in work, work values, and career. It has also been argued that if the career continuum concept is to become operational and thus make the connection between education and work a reality, career education in the schools and career development in the occupational world must be joined together in a single path. The importance of this lies in the acceptance of the idea itself by educators and human resource development leaders, since there is no apparent way every school and industry can maintain individual linkages. In addition, both teachers and those interested in furthering the quality of working life need to be aware of what is being written, thought, and

done in each other's bailiwick. And they should sense through this knowledge and dialogue possible new relationships through work, work values, and career.

What, then, are some specific steps that might increase understanding, communication, and cooperation between career educators and human resource development leaders? Clearly the most feasible way to pursue joint action is through existing industry-education councils. These groups have already done an excellent job in such communities as Niagara Falls and Flint, but seem to have concentrated less on long-term career concerns and changing work values than on entry-level positions. Nevertheless, their work and role is significant, and every attempt should be made to infuse a greater quality of worklife emphasis in the education-work relationship that these groups foster.

Yet another group that can be of great importance in this effort is ASTD—the American Society for Training and Development. It has long been a strong supporter of efforts to improve the education-to-work transition, and has recently completed a significant guide on career development for use in business and industry. Its purpose is to build "an organized body of knowledge" on the subject by concentrating on the "*state of deliberate planning processes* which bear on the field of career development." ASTD is clearly a group that should have a leadership role in the proposed career continuum.[130]

Still other groups have an important part to play. These include NAIEC (National Association for Industry-Education Cooperation), the Council of Business and Professional Women's clubs, and local service organizations. Not to be omitted are parent-teacher associations, the National School Board Association, the American Personnel and Guidance Association, and the National Urban Coalition. There are many more, and those recommended are meant to be suggestive rather than all-inclusive.

Research organizations can also participate. Groups such as the Work in America Institute in Scarsdale, New York, the Institute for Social Research at the University of Michigan, the Conference Board, and the American Center for Quality of Worklife, among others, can play a vital part by support of both theoretical and applied research in the key elements of the career continuum and the general concept itself. Credit should be given to the International Labor Organization for its already extensive and continuous list of publications on the quality of working life, but only a few of its excellent offerings relate to the career education movement.

Unions (AFL–CIO) and management groups can also help to support the lifelong commitment involved in the career continuum. Such unions as the UAW and particularly the head of its GM division, Irving Bluestone, have been pioneers. But it still remains to be seen if a younger union leadership that is now emerging will be receptive to the

new qualitative demands of the rank and file as these can be facilitated by cooperative efforts between school and workplace. Business organizations such as the National Alliance of Businessmen, chambers of commerce and the American Management Association can also help by including in their programs career education as it relates to human resource development. The American Management Association has already published a number of significant books on related subjects in recent years, particularly J. Carroll Swart's important volume on flexitime.[31]

State education departments must also go beyond their excellent support of career education itself to include the changing qualitative and lifelong expectations of the young. They, too, can support cooperative efforts with unions and industry to facilitate the career continuum and thus enable learners of all ages to better respond to the personal and organizational changes they will encounter.

And finally, research and teaching grants from industry, the U.S. Office of Education, and such foundations as the German Marshall Fund and Exxon can lend specific support that goes beyond the resources of groups mentioned earlier. Modest sums for Career Education and Career Development Fellows who move between schools and industry in an organized way could enormously help the diverse groups who now work on the same problem at different times in the course of human and professional development.

We have undoubtedly reached the point where schools, unions, business, and government need to take a fresh look at the many activities each support to make career more than a progression of jobs. This initial step of mutual awareness will hopefully be followed by mutual cooperation, for we are now dealing with students and workers whose work values and career aspirations have undergone great change.

The changes we seek involve nothing less than a completely new way of looking at work, work values, and career. They embrace the new aspirations of youth, the mid-life concerns of adults, and the legitimate career needs of those who are approaching the final years of employment. Most important is the need to view all of these as a totality rather than a series of separate elements, and to see the career continuum as a unified path that can make life and work meaningful and productive.

Notes

1. Hoyt, K. B., "What the Future Holds for the Meaning of Work," *American Vocational Journal*, Vol. 48, No. 1, January 1973, 34–37. Hoyt, K. B., "The Human Side of Work," Paper presented at the New York State Career Education Conference March 17, 1977, Super, D., *Career Education and the Meaning of Work*, Washington: U. S. Department of Health, Education, and Welfare, 1976.
2. Hoyt, K. B., *A Primer for Career Education*. Washington: U. S. Government Printing Office, 1978, 5.
3. Yankelovich, D., "The meaning of work," in *The Worker and the Job. Coping with Change*, ed. by Jerome Rosow. Englewood Cliffs, New Jersey: Prentice-Hall, 1974, 22.
4. Berger, B., "People Work—The Youth Culture and the Labor Market," *The Public Interest*, Vol. 35, Spring, 1974, 56.
5. Yankelovich, D., "Turbulence in the Working World: Angry Workers, Happy Grads," *Psychology Today*, December, 1974, 81–87.
6. Freedman, D., *The Contemporary Work Ethic in Industrialized Market Economy Countries*. Geneva: ILO, 1978, 14.
7. Interview with Kenneth B. Hoyt, *Education and Work*, August 23, 1977, 2.
8. Jobe, M., "Career Education for Adults," *Career Education Quarterly*, Vol. 2, no. 1, Spring, 1977, 20.
9. Fromm, E., *The Sane Society*, New York: Rinehart, 1955, 110.
10. Tonnies, F., *Gemeinschaft und Gesellschaft*, translated by C. P. Loomis in R. Bierstedt, *The Making of Society*, New York: Modern Library, 1959, 294–296.
11. Stern, B. E., *Toward a federal policy on education and work*. Washington: U. S. Department of Health, Education, and Welfare, 1977, 3.
12. Burkett, L. A., "Legislating Career Education," in J. H. Magisos, ed., *Career Education*. Washington: American Vocational Association, 1973, 66–67.
13. Bailey, L. J., *Career and Vocational Education in the 1980's: Toward a Process Approach*. Carbondale, Illinois: Southern Illinois University, 1976, 32. Vocational education included work in such areas as health, personal and public service, business, agriculture, and industrial areas.
14. Evans, R. N., *Foundations of Vocational Education*. Columbus: Charles E. Merrill, 1971, 96.
15. Hoyt, K. B., R. N. Evans, E. F. Mackin, and G. Mangum, *Career Education: What it is and How to Do It*. Salt Lake City: Olympus Publishing Co., 1974, 94–95. For an analysis of Part D of the 1968 amendments to the Vocational Education Act of 1963 see D. C. Nystrom, *Occupation and Career Education Legislation*. Indianapolis: H. W. Sams Co., 1973, 41–42.
16. Bottoms, G. and K. B. Matheny, *A Guide for the Development, Implementation, and Administration of Exemplary Programs and Projects in Vocational Education*. Atlanta, Georgia. Prepared under grant number OEG-0-9-207008-2779 (085) from the Office of Education, U. S. Department of Health, Education, and Welfare, September 1969, 5–6, 24.
17. Marland, S. P., Jr., "Career Education Now," in *Career Education: Perspective and Promise*, ed. by K. Goldhammer and R. E. Taylor. Columbus: Charles E. Merrill, 1972, 35.
18. Marland, S. P., Jr., *Career Education. A Proposal for Reform*. New York: McGraw-Hill, 1974, 10 and 18.
19. Charles L. Law, Jr., *A Search for a Philosophy of Vocational Education*. Paper presented at the Annual Meeting of State Directors of Vocational Education, Washington, D. C., May 12–16, 1975, 1–27.

20. Hoyt, K. B., *A Primer for Career Education*, 4, 7, 35.
21. Bailey, *Career and Vocational Education in the 1980's*, 52.
22. Hoyt, K. B., *A Primer for Career Education*, 7.
23. Goldhammer, K. and R. E. Taylor, *Career Education. Perspective and Promise*, 6.
24. Hoyt, K. B., R. N. Evans, E. F. Mackin, and G. Mangum, *Career Education: What it is and How to Do It*, 101.
25. Herrick, N. Q. and M. Maccoby, "Humanizing Work: A Priority Goal of the 1970's," in L. E. Davis and A. B. Cherns, *The Quality of Working Life*. New York: Free Press, 1975, I, 65.
26. Freedman, *Contemporary Work Ethic*, 14.
27. Goldhammer, K. and R. E. Taylor, *Career Education. Perspective and Promise*, 6.
28. Green, T. F., *Work, Leisure, and the American Schools*. New York: Random House, 1968, 88 and 136–138.
29. Hoyt, K. B., An *Introduction to Career Education. A Policy Paper of the U.S. Office of Education*. Washington: U. S. Government Printing Office, 1975, 3.
30. Van Maanen, J. and E. H. Schein, "Career development," in J. R. Hackman and J. L. Suttle, eds., *Improving Life at Work*. Santa Monica, Calif.: Goodyear Publishing Co., 1977, 34.
31. Hoyt, K. B., "*What the Future Holds for the Meaning of Work*," 36.
32. Super, D., *Career Education and the Meaning of Work*, 26.
33. Hughes, E. C., "The Study of Occupations," in Clifton D. Bryant, *The Social Dimensions of Work*. Englewood Cliffs: Prentice-Hall, 1972, 117.
34. Marland, S. P., Jr., *Career Education. A Proposal for Reform*, 48.
35. Hoyt, K. B., *A Primer for Career Education*, 11.
36. Kanawaty, G., "Career Development: The Concept and Issues," in *Career Planning and Development*. Geneva: ILO, 1976, 4.
37. Schein, E. H., "Career Development: Theoretical and Practical Issues for Organizations," in *Career Planning and Development*. Geneva: ILO, 1976, 9.
38. Hoyt, K. B., *A Primer for Career Education*, 7.
39. See University of Michigan's Survey Research Center study for period between 1973–1977 in *Education and Work*, December 26, 1978, 8.
40. Hoyt, K. B., "Toward a Definition of Career Education," in J. H. Magisos, ed., *Career Education*. Washington: American Vocational Association, 1973, 27–28.
41. Blauner, R., *Alienation and Freedom. The Factory Worker and His Industry*. Chicago: University of Chicago Press, 1964, 15.
42. Mac Michael, D. C., "Occupational Bias in Formal Education and its Effect on Preparing Children for Work," in *Work and the Quality of Life*, ed. by J. O'Toole, Cambridge, Mass.: MIT Press, 1974, 284.
43. Green, T. F., *Work, Leisure, and the American Schools*, 12–45.
44. Mills, T., "Human Resources—Why the New Concern," *Harvard Business Review*, March-April 1975, 132.
45. Weil, R., *Alternative Forms of Work Organization. Improvement of Labour Conditions and Productivity in Western Europe*. Geneva: International Institute for Labour Studies, 1976, 1.
46. Trist, E. L., "Urban North America: The Challenge of the Next Thirty Years," *Journal of Town Planning Institute of Canada*, Vol. 10, 4–20.
47. Ergonomics is an interdisciplinary approach to the problem of man-machine relationships. It includes the study of anatomy, physiology, and psychology to help adapt the working environment to the needs of the worker. Ergonomics is also concerned with the management of work and resources so that the use of the body, tools, and parts are optimized, and waste is eliminated in the various processes of production. See F. H. Bonjer, "Ergonomics in Reducing Physiological Stress and Fatigue," in *Ergonomics in Industry, Agriculture, and Forestry*. Geneva: ILO, 1977, 7.

48. Stern, B. and F. Best, "Cyclic Life Patterns," in *Relating Work and Education*, ed. by D. W. Vermilye. San Francisco: Jossey-Bass, 1977, 260.

49. Hecker, D. E., "The Jam at the Bottom of the Funnel: The Outlook for College Graduates," *Occupational Outlook Quarterly*, Spring, 1978, Vol. 22, no. 1, 37; Lecht, L., *et al*, *Changes in Occupational Characteristics: Planning Ahead for the 1980's*. New York: Conference Board, 1976, 5. Some estimates suggest a preferred job deficit of only 950,000 between 1974 and 1985. *Occupational Projections and Training Data*, Bulletin 1918. Washington: U. S. Government Printing Office, 1976, 19–20. It is important to note that this "labor abundance" may be converted into scarcity after 1985 due to a slower growth of the labor force (A. R. Weber, "Casual Approach to Labor Supply May Haunt Business," *Wall Street Journal*, January 30, 1978, 14).

50. *Occupational Outlook Handbook*, 1978–79 edition. Washington: U. S. Government Printing Office, 1978, 26.

51. O'Toole, J., *Work, Learning, and the American Future*. San Francisco: Jossey-Bass, 1977, 38–39.

52. *Ibid.*, 42; Strauss, G., "Is There a Blue Collar Revolt Against Work?," in R. F. Fairfield, ed., *Humanizing the Workplace*. Buffalo: Prometheus Books, 1974, 42; Klein, L., *New Forms of Work Organization*. Cambridge, England: Cambridge University Press, 1976, 12–13; Givry, J. de, "The ILO and the Quality of Working Life: A New International Programme," *International Labour Review*, May-June, 1978, 262; N. A. B. Wilson, *On the Quality of Working Life*, Manpower Papers, No. 7, Department of Employment. London: Her Majesty's Stationery Office, 1973, 44.

53. Lee, H. C. and J. J. Grix, "Communication: Alternative to Job Enrichment," *The Personnel Administrator*, October 1975, 21. Important positive changes in quality of worklife at GM can be seen in their joint efforts with the UAW since 1972 at the auto assembly plant in Tarrytown, New York. B. Walfish, "QWL Project at GM Plant Cited as Key to Labor-Management Accord," *World of Work Report*, December 1977, Vol. 2, no. 12, 139.

54. *Business Week*, February 20, 1978, 76. Some additional evidence could be gleaned from the remarks of Irving Bluestone, Vice President and Director, International UAW, General Motors Division at the recent GM-UAW Quality of Worklife Conference at Tarrytown, New York on November 9, 1978.

55. Yankelovich, "Turbulence in the Working World," 81–87. This lesser concern with economic security may be explained in part by the availability of unemployment compensation for substantial periods of time, dual-earner families, and a growth in the number of single persons over 21 living with parents.

56. Suttle, J. L., "Improving Life at Work—Problems and Prospects," in *Improving Life at Work. Behavioral Science Approaches to Organization Change*, ed. by J. R. Hackman and J. L. Suttle (Santa Monica, Calif.: Goodyear Publishing Co., 1977), 25.

57. Walton, R. E., "How to Counter Alienation in the Plant," *Harvard Business Review*, November-December 1972, Vol. 50, 72.

58. *Wall Street Journal*, October 13, 1978, 1 and 35. Note the strike by 2,000 workers at the Volkswagen auto assembly plant in New Stanton, Pennsylvania in October 1978 in which a contract negotiated by the UAW was overwhelmingly rejected. UAW President Douglas Fraser said, "the rejection came as a real shocker. We don't know what happened." (*Ibid.*, 35).

59. Abbott, W., "Work in the Year 2001," *The Futurist*, February 1977, Vol. 9, no. 1, 25–29.

60. Cooper, M. R., B. S. Morgan, P. M. Foley, and L. B. Kaplan, "Changing Employee Values: Deepening Discontent," *Harvard Business Review*, January-February 1979, 117–118.

61. Owen, J., "An Overview of Alternative Schedules," in *Alternative Work Patterns. Changing Approaches to Work Scheduling*. Scarsdale, N. Y.: Work in America Institute, 1976, 9.

62. Hickson, D., D. Pugh, and D. Pheysey, "Organization Structure: Is Technology the Key," in K. N. Wexley and G. A. Yukl, *Organizational Behavior and Industrial Psychology*. New York: Oxford University Press, 1975, 240–241.
63. Ginzburg, E., "The Job Problem," *Scientific American*. November 1977, Vol. 237, no. 5, 49.
64. Etzioni, A., "Opting Out: The Waning of the Work Ethic," *Psychology Today*. July 1977, 18.
65. Maccoby, M. and K. A. Terzi, "Character and Work in America," in P. Brenner, R. Borosage, and B. Weidner, *Exploring Contradictions: Political Economy in the Corporate State*. New York: David McKay, 1974, 126.
66. Walton urges that attempts to redesign work include "all aspects of work" so that an internally consistent work culture can be created. (R. E. Walton, "From Hawthorne to Topeka to Kalmar," in *Man and Work in Society*, ed. by E. L. Cass and F. G. Zimmer. New York: Van Nostrand Reinhold Co., 1975, 117).
67. Lawler, E. E. III and J. A. Drexler, Jr., "Dynamics of Establishing Cooperative Quality of Worklife Projects," *Monthly Labor Review*. March, 1978, Vol. 101, no. 3, 24–25. The authors suggest some seven basic obstacles to the establishment of QWL programs.
68. Vough, C. F., *Tapping the Human Resource: A Strategy for Productivity*. New York: AMACOM, 1975, 81–82. Vough was formerly Vice President for Manufacturing at IBM.
69. Dufour, C., "Unpleasant or Tedious Jobs in the Industrialised Countries," *International Labour Review*. July-August, 1978, Vol. 117, no. 4, 416.
70. Herrick, N. Q. and M. Maccoby, "Humanizing Work: A Priority Goal of the 1970's," in L. E. Davis and Albert B. Cherns, *The Quality of Working Life*. New York: Free Press, 1975, I, 64–67; Walton, R. E., "Criteria for Quality of Working Life," Ibid., 93–97; Taylor, J. C., *Concepts and Problems in Studies of the Quality of Working Life*, Graduate School of Management, UCLA, December 1973, 14–18; Glaser, E. M., *Productivity Gains Through Worklife Improvements*. New York: Harcourt Brace Jovanovich, 1976, 3–4; Dy, F. J., "Technology to Make Work More Human," *International Labour Review*. September-October 1978, Vol. 117, no. 5, 543–544; Tynan, D., "Job Improvement: The Personal Views of a Practitioner," *International Labour Review*. May-June, 1978, Vol. 117, no. 3, 326–327; Delamotte, Y. and K. F. Walker, "Humanisation of Work and the Quality of Working Life—Trends and Issues," Bulletin 11. Geneva: International Institute for Labour Studies, 1974, 4; Walker, K. and R. Shore, "Towards a Policy for Life at Work," in *Policies for Life at Work*. Paris: OECD, 1977, 27; Günther, H., "Humanisation of Work and Social Policy: A Sketch," *Labour and Society*. January 1977, Vol. 2, no. 1, 89–91.
71. Thorsrud, E., "Democratization of Work as a Process of Change Towards Non-Bureaucratic Types of Organization," in G. Hofstede and M. S. Kassen, eds., *European Contributions to Organization Theory*. Assen, The Netherlands: Van Gorcum, 1976, 245–246, 251–256. Thorsrud sees the semiautonomous work group as necessary to handle the information and processes that are increasingly difficult for the individual in a sophisticated technological and bureaucratic environment. He also sees it as "an attempt to establish a self-sustaining process of organizational learning." The background for Thorsrud's work can be found in earlier work at the Tavistock Institute under E. Trist and F. E. Emery, particularly the research on the long wall approach to coal mining.
72. Gyllenhammar, P. G., "How Volvo Adapts Work to People," *Harvard Business Review*. July-August 1977, 103, 107–108.
73. Collier, B. L., "Industrial Psychology on the Line," *Psychology Today*. July 1978, 66, 76. This article was based on an interview with Delmar Landen, Jr., the head of GM's Organizational Research and Development Department.
74. Rae, James H., Jr., *Resistance to Change—Myths and Realities*. Unpublished study,

13–16, 22. James Rae is with GM's Organizational Research and Development Department. Also see the results of a joint GM-UAW effort at Tarrytown, New York since 1972 in the *Proceedings of the 1978 GM Executive Conference on Quality of Work Life*, Michigan State University Management Education Center, Troy, Michigan, April 12, 1978, 55–67.

75. From comments made by union and management representatives from the GM Tarrytown plant at the GM-UAW Quality of Worklife Conference at Tarrytown, New York on November 9, 1978.
76. Abbott, W., "Work in the Year 2001," 25.
77. Lawler, E. E. III, "The New Plant Revolution," *Organizational Dynamics*. Winter, 1978, 3–6.
78. Rosow, J. M., "Changing Attitudes to Work and Lifestyle," in *Alternative Work Patterns. Changing Approaches to Work Scheduling*. Scarsdale, N. Y.; Work in America Institute, 1976, 5–7.
79. Leon, C. and R. W. Bednarzik, "A Profile of Women on Part-Time Schedules," *Monthly Labor Review*. October 1978, Vol. 101, no. 10, 3.
80. Swart, J. C., *A flexible approach to working hours*. New York: AMACOM, 1978, 1–3, 54. Flexitime arrangements normally involve a set hourly total over a week or month. Within this total, the employee can begin and end work each day at his or her discretion so long as the required daily time period—the "core time" is maintained and the person completes the total number of working hours for the designated time period. Flexitour, on the other hand, permits a worker to select a shift or tour that can be kept until the opportunity to change becomes available.
81. Maurice, M., *Shift Work*. Geneva: ILO, 1975, 42–47; Carpentier, J. and P. Cazamian, *Night Work*. Geneva: ILO, 1977, 43–56.
82. Dufour, C., "Unpleasant or Tedious Jobs," 406–407; Dy, "Technology to Make Work More Human," 543; Günther, H., "Humanisation of Work and Social Policy," 90–91; Walker, K. and L. Shire, "Toward a Policy for Life at Work," 27.
83. Levitan, S. A., "Work and the Welfare State," *Challenge*. July-August 1977, 29.
84. Luxemberg, S., "Business is Big in Education, Too." *New York Times*, January 7, 1979, Education 15.
85. Charner, I. *et al.*, *An Untapped Resource: Negotiated Tuition-Aid in the Private Sector*. Washington: National Manpower Institute, 1978, 5, 74, 85.
86. Davis, L. E., "New Work Schemes Discard Scientific Management," *ILO Information*. 1977, Vol. 5, no. 2, 4; Lawler, E. E. III, "The New Plant Revolution," *Organizational Dynamics*. Winter, 1978, 3–6; Cherns, A., "Social Change and Work," in P. Warr, ed., *Personal Goals and Work Design*. London: John Wiley, 1976, 8–9; Tynan, "Job Improvement," 326–327; *Policies for Life at Work*, 12–13; Walton, "Criteria for Quality of Working Life," 95; Herrick and Maccoby, "Humanizing Work," 65.
87. Elgin, D. S. and R. A. Bushnell, "The Limits to Complexity: Are Bureaucracies Becoming Unmanageable," *The Futurist*. December 1977, 337.
88. Aiken, M. and J. Hage, "Organizational Alienation: A Comparative Analysis," *American Sociological Review*. 1966, Vol. 31, 506. This study is based on research in 16 welfare organizations in the United States.
89. Argyris, C., "Being Human and Being Organized," in *Current Perspectives in Social Psychology*, ed. by E. P. Hollander and R. G. Hunt. New York: Oxford University Press, 1967, 573–578. Work measurement in white collar organizations has increasingly resulted in task fragmentation. "Target times" established by one consulting firm suggested 24 seconds to prepare a first class mailing label and 25 seconds for a phone call to confirm an order (D. Jenkins, *Job Power. Blue and White Collar Democracy*. New York: Penguin Books, 1974, 50)
90. Nelson, D., *Managers and Workers. Origins of the New Factory System in the United States 1880–1920*. Madison: University of Wisconsin Press, 1975, 48–54.

91. See the description of an "office factory" for 1,600 British civil service clerks in Wilson, *On the Quality of Working Life*, 8–10.
92. Walton, "Criteria for Quality of Working Life," 93–97; Wilson, *On the Quality of Working Life*, 25; Walker, K., "Workers Attitudes—A Key to the Quality of Working Life," in L. E. Davis, A. B. Cherns *et al.*, *The Quality of Working Life*. New York: Free Press, 1975, I, 2; Mills, T., *Quality of Work Life: the Name That Isn't*. Adapted from an address to the Centre International de Recherches et D'Études en Management, Montréal, Canada, June 8, 1978, 9–10, 24–25; Suttle, "Improving Life at Work," 4; Wood, M., J. E. Rasmussen, and E. E. Lawler III, *Federally Sponsored Research on the Quality of Working Life: Planning, Support, and Products*. Seattle: Battelle Memorial Institute, Human Affairs Research Center, 1975, 23.
93. Mayo, E., *The Social Problems of an Industrial Civilization*. Boston: Graduate School of Business Administration, Harvard University, 1945, 111.
94. Lee, H. C., and J. J. Grix, "Communication," 22–23; Glaser, *Productivity Gains*, 3–4; Tynan, "Job Improvement, 326–327; *Policies for Life at Work*, 12–13; Potts, M., "Office Poll: Work Will Improve if Conditions Do," Rochester *Democrat and Chronicle*, November 22, 1978, 6 D (on L. Harris survey of 1,400 executives, workers, and office designers for Steelcase, Inc.); Wilson, *On the Quality of Working Life*, 22; Kanter, R. M., *Men and Women of the Corporation*. New York: Basic Books, 1977, 278–279.
95. Walton, "Criteria for Quality of Working Life," 96–97; Freedman, *Contemporary Work Ethic*, 14.
96. Yankelovich, D., "The New Psychological Contracts at Work" *Psychology Today*. May 1978, 47–50.
97. Warr, P. and T. Wall, *Work and Well-Being*. Harmondsworth, Middlesex, England: Penguin Books, 1975, 119–125.
98. Hackman, J. R. and E. E. Lawler III, "Employee Reactions to Job Characteristics," *Journal of Applied Psychology*, 1971, Vol. 55, 259–286.
99. Hackman, J. R., "Work Design," in J. R. Hackman and J. L. Suttle, *Improving Life at Work*, 98.
100. Kanter, R. M., *Men and Women of the Corporation*, 269–270; 285.
101. Hackman, "Work Design," 101–103.
102. Mills, *Quality of Work Life*, 3.
103. From comments by GM managers and UAW union representatives at the GM-UAW Quality of Worklife Conference at Tarrytown, New York on November 9, 1978. James Rae is associated with GM's Organizational Research and Development office.
104. Donleavy, T., "U. S. Productivity in Grave Decline," *American Business*. December 1978, 1.
105. *Wall Street Journal*, January 16, 1979, 20.
106. Mills, "Human Resources," 124.
107. Schrank, R., "How to Relieve Worker Boredom," *Psychology Today*. July 1978, 80.
108. Wimpisinger, W. W., *Job Enrichment—Another Part of the Forest*. Industrial Relations Research Association Series, Proceedings of the Twenty-Fifth Anniversary Meeting, December 1972, Toronto, Canada, 154–159.
109. Kornhauser, A., *Mental Health of the Industrial Worker. A Detroit Study*. New York: Wiley, 1965, 207.
110. Brody, J. E., "Studies Asking: Who's Happy," *New York Times*, January 16, 1979, C 1–C 2.
111. The universe of employment includes such opportunities as mortuary beautician, tank house supervisor, screw-machine set-up operator, creeler, hostler, and photogrammetrist. It is little wonder that students and workers need assistance in everything from career awareness to career pathing: *Dictionary of Occupational Titles*, Fourth Edition, 1977. Washington: U. S. Department of Labor, 1977, 34, 234, 501, 622, 879.
112. Hoyt, "What the Future Holds for the Meaning of Work," 37.

113. Mills, Ted, "Work as a Learning Experience," in *Relating Work and Education*, ed. by D. W. Vermilye. San Francisco: Jossey-Bass, 1977, 99.
114. DuBrin, A., *Fundamentals of Organizational Behavior. An Applied Perspective*. New York: Pergamon Press, 1974, 332–339.
115. Erikson, E. A., *Childhood and Society*, 2nd ed. New York: Norton, 1963, 154.
116. *National Conference on Alternative Work Schedules*. Chicago, Illinois, March 21–22, 1977, p. 3.
117. Hoyt, "What the Future Holds for the Meaning of Work," 37.
118. Data based on a University of Michigan Survey Research Center study in 1976 on over 2,000 women and men by Joseph Veroff, Elizabeth Donovan and Richard Kulka: *Institute for Social Research Newsletter*, Winter, 1979, 4–5.
119. Yankelovich, "The New Psychological Contracts at Work," 47, 49.
120. Cooper, M. R. *et al.*, "Changing Employee Values," 118.
121. Kanter, R. M., *The Changing Shape of Work: Psychosocial Trends in America*. Current Issues in Higher Education, 1978; National Conference Series, AAHE. Washington: AAHE, 1978, 5.
122. Schein, "Career Development," 9.
123. Tilgher, A., *Homo Faber: Work Through the Ages*, translated by Dorothy Canfield Fisher. New York: Harcourt, Brace, 1930, 134, 137.
124. Freud, S., *Civilization and Its Discontents*. London: Hogarth Press, 1930, 34, n. 1.
125. Schumacher, E. F., "Good Work," in *Relating Work and Education*, ed. by D. W. Vermilye. San Francisco: Jossey-Bass, 1977, 63.
126. Hoyt, "What the Future Holds for the Meaning of Work," 36. Adult socialization to career refers to the processes through which individuals learn the skills required in an occupation in addition to an understanding of their place in the occupation and a perception of the occupation as a totality. It also includes the personal relationship to changed meanings of work over the course of a lifetime.
127. Schein, "Career Development," 10–11.
128. Chickering, A. W., *A Conceptual Framework for Educational Alternatives at Empire State College*. Saratoga Springs, New York: Empire State College, 1976, 56–57.
129. Sarason, S. B., E. K. Sarason, and P. Cowden, "Aging and the Nature of Work," *American Psychologist*, May 1975, 584–591.
130. Connelly, Sharon L., "Career development: Are We Asking the Right Questions," *Training and Development Journal*, March 1979, 8–9. Also see J. C. Aplin and D. K. Gerster on this subject in "Career development: An Integration of Individual and Organizational Needs," *Personnel*, March-April 1978, 30–31.
131. Swart, J. Carroll, *A Flexible Approach to Working Hours*. New York: AMACOM, 1978. See the excellent section on the quality of working life on pages 9–28.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1980 O—299-036